

Claims

1. An image capture apparatus, comprising:

image-taking mode selection means, in which
5 image-taking mode information containing information on a particular color determined according to a predetermined image-taking condition is set, for selecting desired image-taking mode information from the set image-taking mode information;

10 color convergence parameter storage means for storing a color convergence parameter value containing position data indicative of a position of a predetermined color in a color-difference plane, correction range setting data for setting to a correction range a predetermined range centered
15 at the position of the predetermined color, and convergence coefficient data for converging a particular color corresponding to the correction range to the position indicative of the predetermined color;

color convergence parameter setting means for selecting
20 and setting a color convergence parameter value for the corresponding particular color from the color convergence parameter storage means on a basis of the image-taking mode information selected by the image-taking mode selection means; and

25 color convergence correction processing means for correcting a particular color in a video signal into the predetermined color on a basis of a correction amount calculated on a basis of the color convergence parameter value set by the color convergence parameter setting means.

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2. The image capture apparatus according to claim 1,

characterized in that the correction range setting data of the color convergence parameter storage means is data for setting to the correction range a circular or elliptical range centered at the position of the predetermined color in the color-difference plane.

3. The image capture apparatus according to claim 1, characterized in that the color convergence parameter storage means comprises a function for changing the color convergence parameter values.

4. The image capture apparatus according to claim 1, characterized in that the image-taking mode selection means comprises a function for automatically selecting the image-taking mode information according to an image-taking environment.

5. An image capture apparatus, comprising:
image-taking mode selection means, in which image-taking mode information containing information on a particular color determined according to a predetermined image-taking condition is set, for selecting desired image-taking mode information from the set image-taking mode information;

color convergence parameter storage means for storing a color convergence parameter value containing position data indicative of a position of a predetermined color in a color-difference plane, correction range setting data for setting to a correction range a predetermined range centered at the position of the predetermined color, and convergence coefficient data for converging a particular color

corresponding to the correction range to the position indicative of the predetermined color;

color convergence parameter setting means for selecting and setting a color convergence parameter value for the
5 corresponding particular color from the color convergence parameter storage means on a basis of the image-taking mode information selected by the image-taking mode selection means;

particular-color extraction means for extracting a video signal of a particular color from a video signal on a
10 basis of the image-taking information selected by the image-taking mode selection means;

luminance correction means for correcting a luminance level of the video signal according to a luminance level in the video signal of the particular color extracted by the
15 particular-color extraction means; and

color convergence correction processing means for correcting the particular color in the video signal into the predetermined color on a basis of a correction amount calculated on a basis of the color convergence parameter value
20 set by the color convergence parameter setting means.

6. The image capture apparatus according to claim 5, characterized in that the luminance correction means calculates a proportion of the video signal of the particular
25 color in the video signal and corrects the luminance level of the video signal of the particular color according to the calculated proportion.

7. The image capture apparatus according to claim 5,
30 characterized in that the correction range setting data of the color convergence parameter storage means is data for

setting to the correction range a circular or elliptical range centered at the position of the predetermined color in the color-difference plane.

5 8. The image capture apparatus according to claim 5, characterized in that the color convergence parameter storage means comprises a function for changing the color convergence parameter value.

10 9. The image capture apparatus according to claim 5, characterized in that the image-taking mode selection means comprises a function for automatically selecting the image-taking mode information according to an image-taking environment.

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10. An image capture method, characterized by comprising:
 an image-taking mode selection step of selecting desired image-taking mode information from image-taking mode information in which image-taking mode information containing
20 information on a particular color determined according to a predetermined image-taking condition is set;

 a particular-color extraction step of extracting a video signal of a particular color from a video signal on the basis of the image-taking mode information selected in the
25 image-taking mode selection step;

 a color-difference detection step of detecting color-difference data on the particular color from the video signal of the particular color extracted in the particular-color extraction step;

30 a color correction value calculation step of selecting correction reference data on the corresponding particular

color from correction reference data storage means storing
correction reference data which is a reference for correcting
the particular color into a predetermined color, on a basis
of the image-taking mode information selected in the
5 image-taking mode selection step, and calculating a color
correction value for correcting the corresponding particular
color into the predetermined color on a basis of the selected
correction reference data and the color-difference data on
the particular color detected by the color-difference
10 detection step; and

a color correction processing step of correcting the
particular color of the video signal into the predetermined
color on a basis of the color correction value calculated in
the color correction value calculation step.